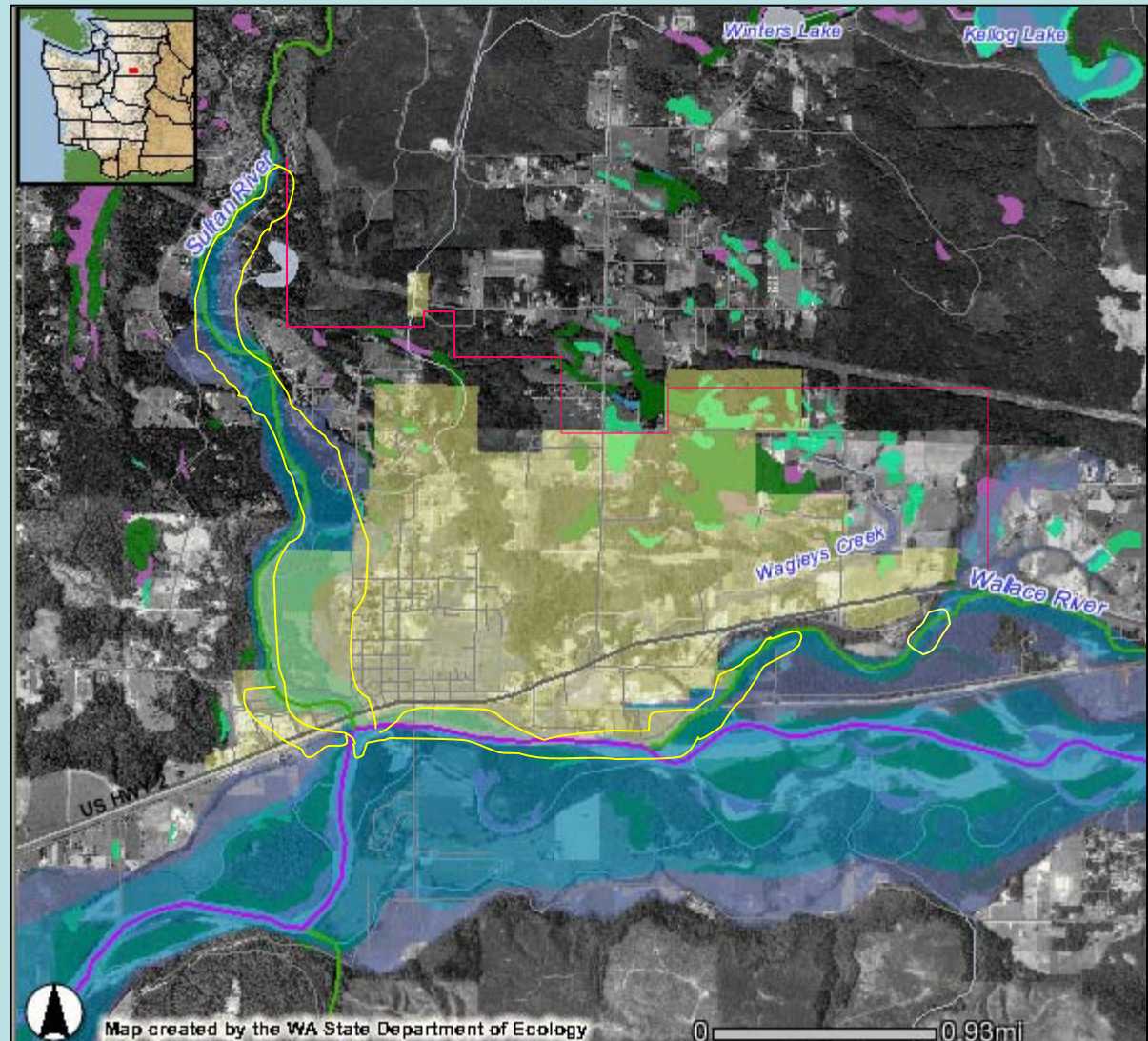
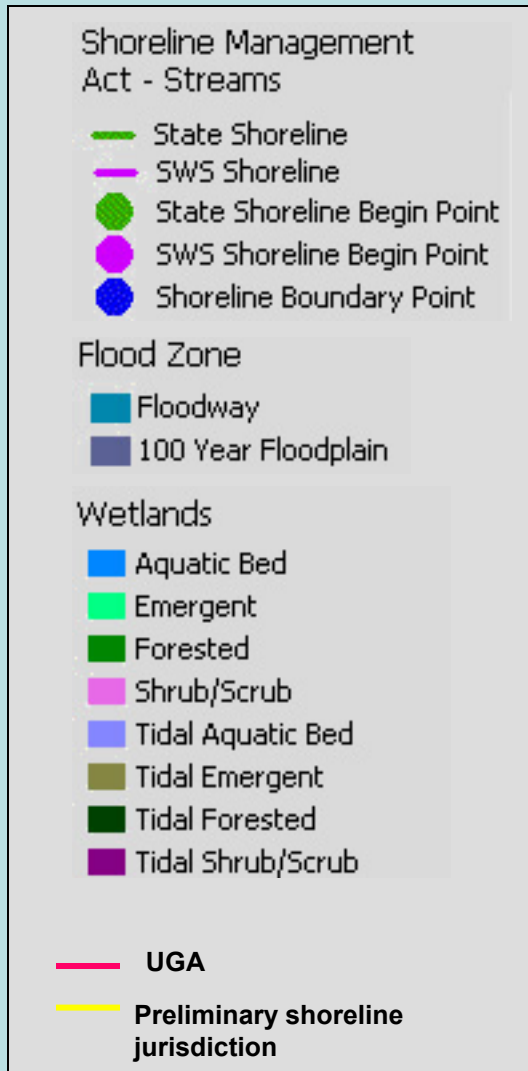


Shoreline jurisdiction characterization

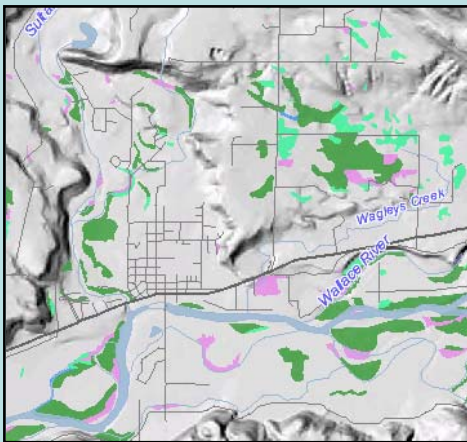
Map preliminary shoreline jurisdiction-



Analyze information collected during inventory

Example: Sultan preliminary wetland mapping:

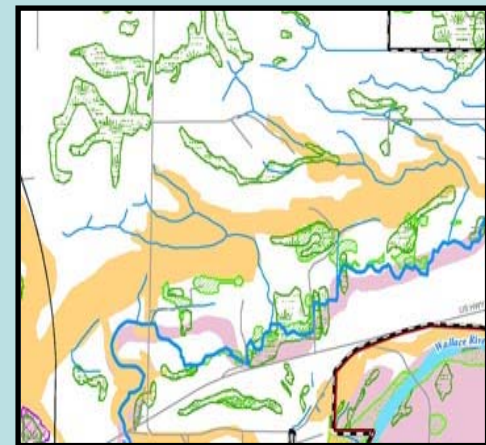
- Three sets of maps ranging from NWI to locally surveyed wetland delineations.
- Cross-comparison of wetland maps, hydric soils map and orthophoto to assess data layer accuracy.
- Document data sources and analysis methods for characterization report.



NWI WETLAND



ORTHO PHOTO



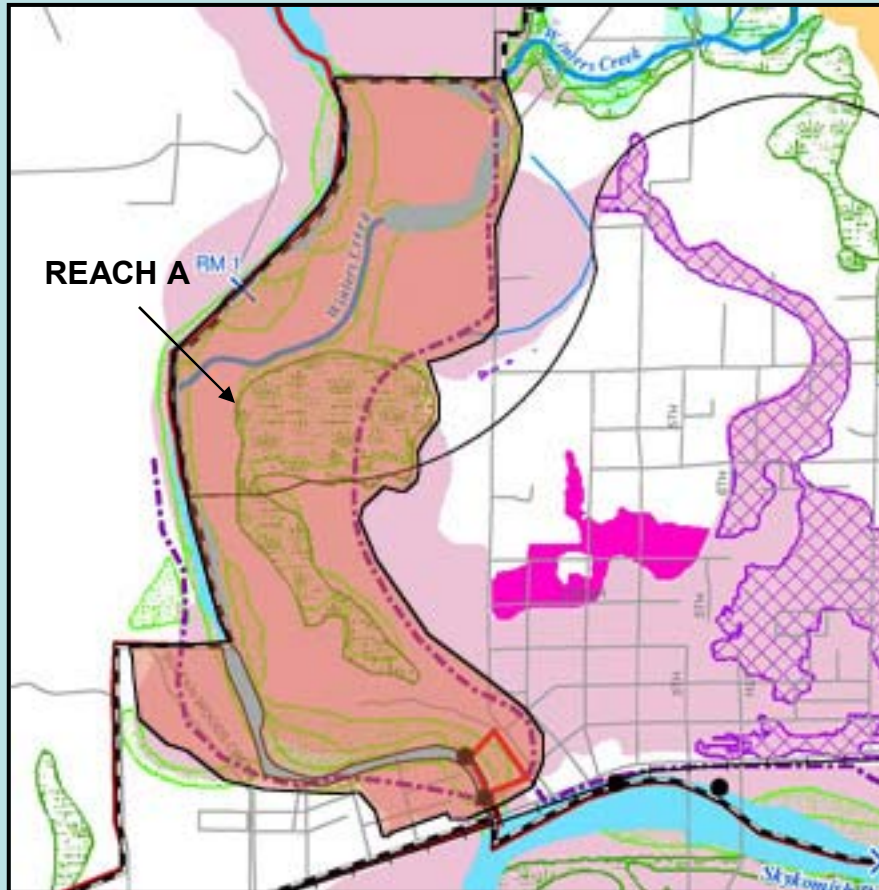
LOCALLY SURVEYED WETLANDS

Divide shoreline into reaches :



- Use land use, zoning and ownership
- Confluence of streams and tributary input points
- City boundary versus UGA
- Width of riparian vegetation versus developed area along stream banks
- Document basis for separation into each reach for characterization report

Map relevant layers:



Characterize each reach:

- **dominant current and planned land use** (e.g. currently pasture & residential, planned low to moderate residential development)
- **primary environment / use issues** (e.g. flooding, public access)
- **critical ecological functions** (e.g. flood water storage capacity of adjacent wetlands; riparian vegetation provides bank stability sediment trapping from runoff and habitat)

Field work -

Bring to the field:

- 1) Printed zoomed photos indicating preliminary reaches with zoning, wetlands, soils, and jurisdictional boundaries



- 2) List of identified data gaps

*Hydric soils
indeterminate at North
reach A*

*Check riparian density
East reach C*

*Check possibility to
extend public trail
reach A*

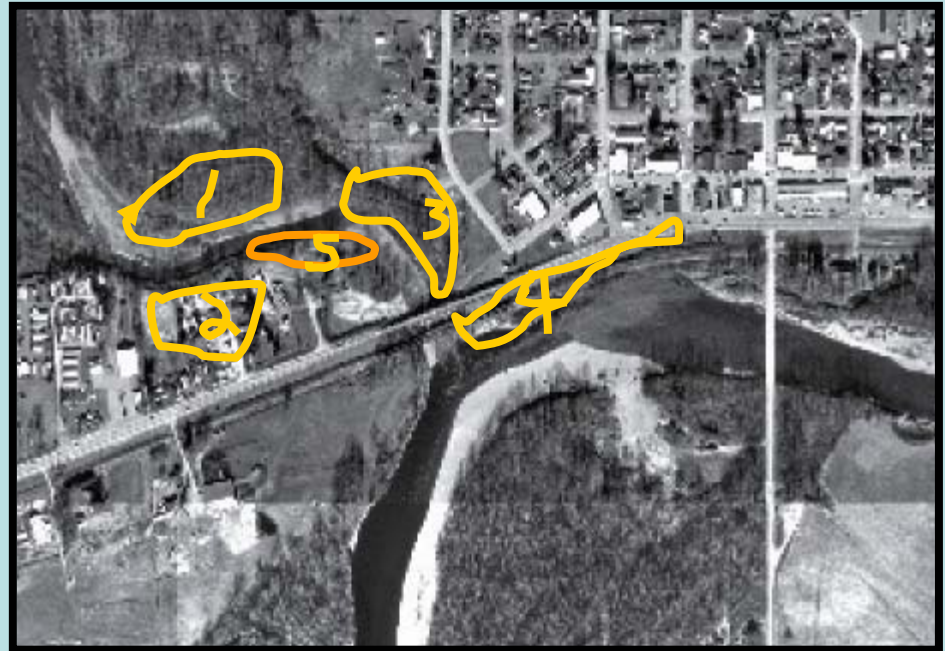
*Potential wetlands in
reach B along tributary*

In the field:

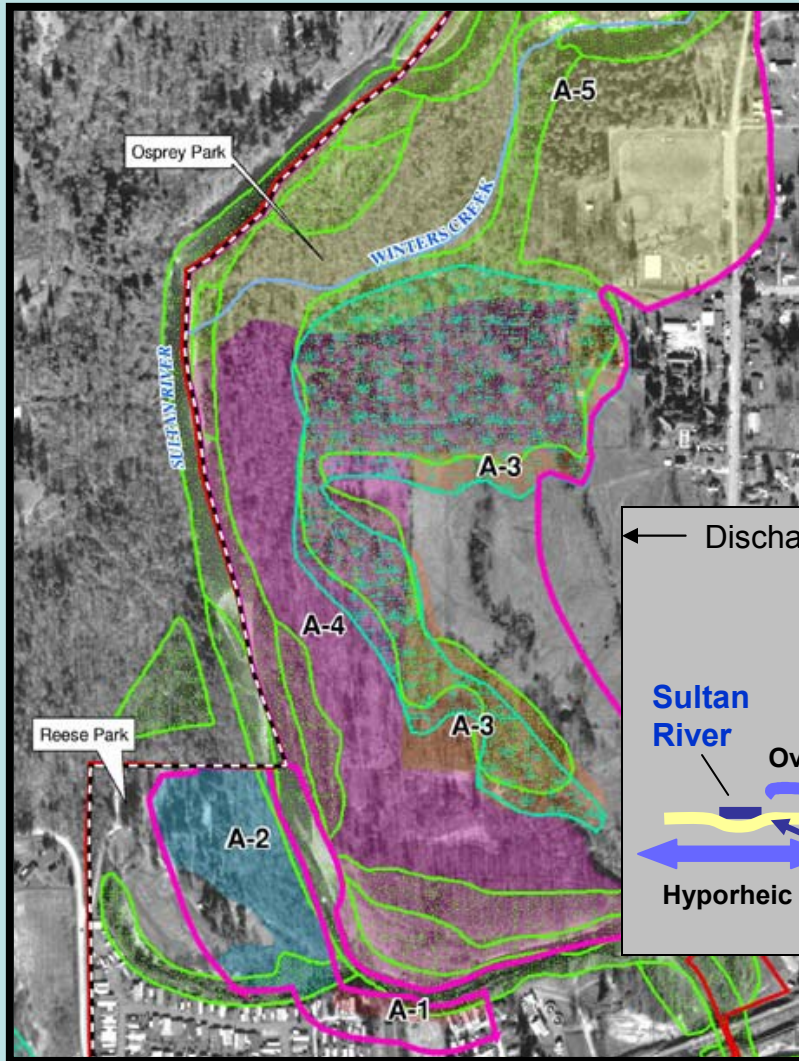


Apply prior determined broad characterizations such as-

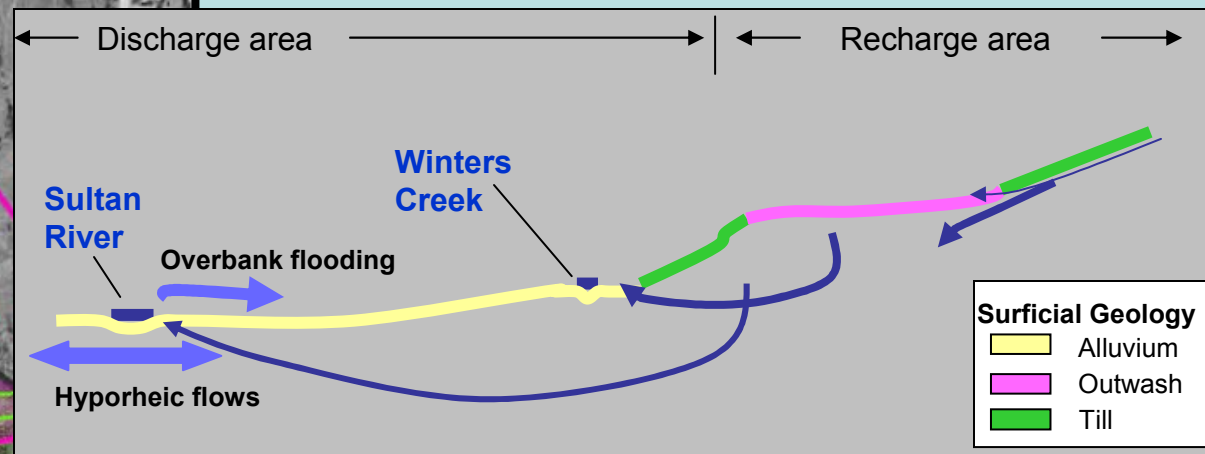
1. *mixed age deciduous/coniferous forest 50-200 feet wide*
2. *residential development to edge of shoreline;*
3. *bank armoring with no streamside cover;*
4. *narrow deciduous riparian fringe 5-20 feet wide;*
5. *unvegetated gravel bar;*
6. *wetland bench;*
7. *golf course etc.*



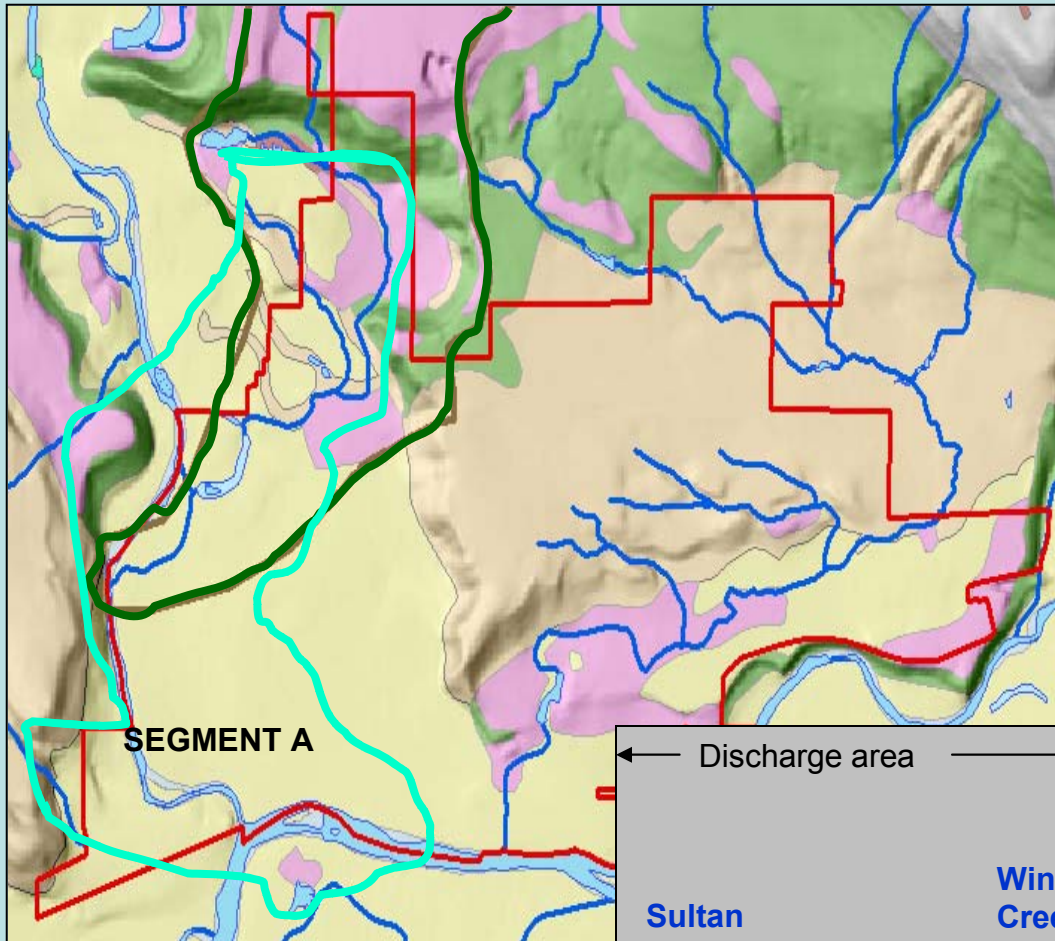
Integrate landscape characterization findings into identification of shoreline jurisdiction opportunity areas



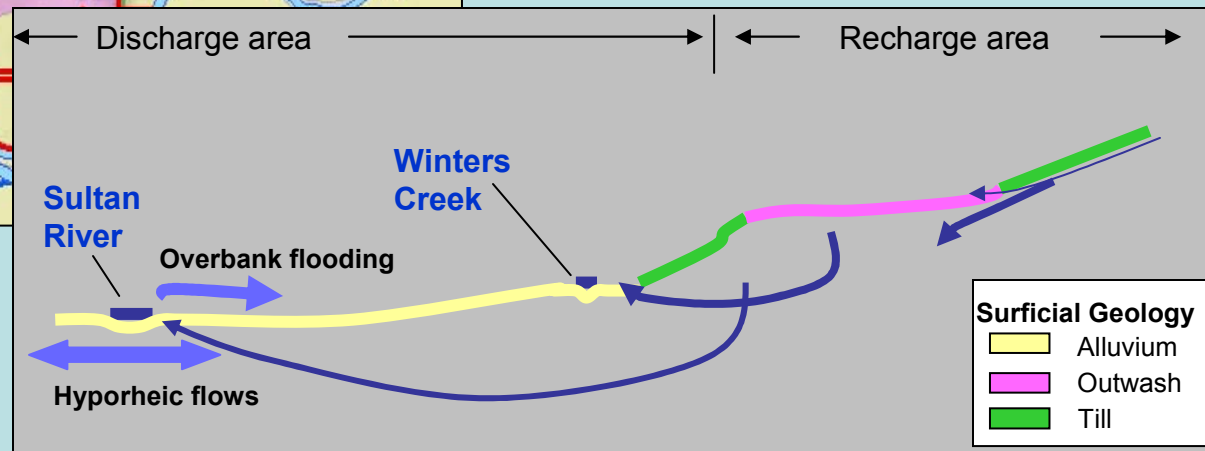
“Protection of the floodplain ... will ensure protection of the processes of overbank flooding and hyporheic flows. These processes support the hydrology of existing wetlands and streams”.



Opportunity for protecting Segment A

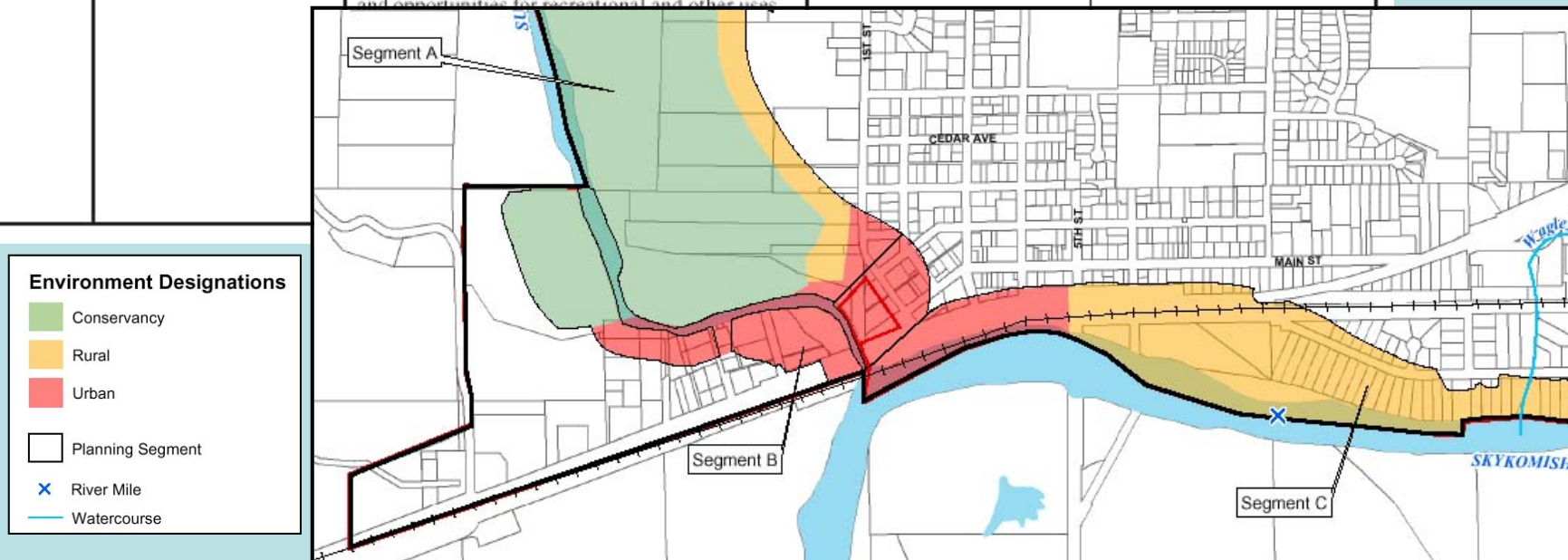


“Although located outside the shoreline jurisdictional boundary, protection of outwash deposits in the upper Winters creek watershed would protect water flow processes originating outside of the shoreline jurisdiction but would sustain hydrology to riparian wetlands in Winters creek within the shoreline jurisdiction as well as wetlands at the base of the steep till slopes to the north”.



Recommend new environment designations and document rationale.

Planning Segment	Existing Shoreline Environment Designation (Snohomish County SMP)	Intent or Purpose (Snohomish County SMP)	Preliminary Recommended Environment Designation	Rationale
A	Conservancy, Rural and Urban (east bank); Conservancy and Urban (west bank)	<p>Conservancy: The objective in designating a Conservancy Environment is to protect, conserve, enhance and manage existing natural resource areas and valuable historic and cultural areas. This should be done in a manner that will insure recreational benefits to the public, or achieve sustained resource utilization without substantial adverse modification of shorelines or topography.</p> <p>Rural: The objective of designating a Rural Environment is to protect agricultural land from urban expansion, restrict intensive development along undeveloped shorelines, function as a buffer between urban areas, and maintain open spaces and opportunities for recreational and other uses.</p>	<p>Natural</p> <p>Urban Conservancy</p> <p>Aquatic (portions of the Sultan River waterward of the ordinary high water mark)</p>	Segment A along the Sultan River consists of parks and open space, floodplain, and wetlands, with limited single-family residential development.



Key points:

- Encourage Ecology and public participation early on.
- Inventory: First use all available, relevant information.
- Field work follows inventory - for data validation and addressing data gaps.
- Analysis steps:
 1. Note the obvious.
 2. Determine water flow processes through landscape scale characterization
 3. Characterize shoreline jurisdiction (reach-scale); incorporate findings from landscape analysis to assess ecosystem function
 4. Identify opportunities for protection, restoration, public access and shoreline use.
- The final analysis integrates findings in an accessible manner. It will be used by the local citizenry to inform decisions about where they live.